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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,731

11/13/2006

Bernd Howe

101769-377 KGB

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27384 7590 01/26/2009
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EXAMINER

BODAWALA, DIMPLE N

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,731	Applicant(s) HOWE ET AL.	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/9/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

- ❖ Claims 1-9 are pending.

In view of the amendment filed on 10/9/2008, following rejections and objection are withdrawn as a reason of record from the previous office action mailed on 7/22/2008.

- ❖ Objection of Information Disclosure Statement.
- ❖ Objection of claim 6.
- ❖ Rejection of claim 6 under 35 USC 112, second paragraph.
- ❖ Rejection of claims 1-4 and 6 under 35 USC 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Weber, Jr. (US 3,450,295).
- ❖ Rejection of claims 1-4 and 6 under 35 US C 103(a) as being unpatentable over Weber, Jr. (US 3,450,295) in view of Korchnak et al. (US 2003/0047268).
- ❖ Rejection of claim 5 under 35 USC 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Weber, Jr. (US 3,450,295) and further in view of Ashcroft et al. (US 3,689,320).

- ❖ Rejection of claims 1-4 and 6 under 35 USC 103(a) as being unpatentable over Pierrot et al. (US 5,852,854) in view of Ogawa (US 6,103,047).
- ❖ Rejection of claims 1-4 and 6 under 35 USC 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Ogawa (US 6,103,047).
- ❖ Rejection of claims 1-2 and 6 under 35 USC 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Preston (US 5,118,454).
- ❖ Rejection of claim 5 under 35 USC 103(a) as being unpatentable over Pierrot et al. (US 5,852,854) in view of Ogawa (US 6,103,047) and further in view of Ashcroft et al. (US 3,689,320).
- ❖ Rejection of claim 5 under 35 USC 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Ogawa (US 6,103,047) and further in view of Ashcroft et al. (US 3,689,320).

Response to Arguments

1. Applicant's arguments, see Remarks, filed on 10/9/2008, with respect to the rejection(s) of claim(s) 1-6 under 103(a) have been fully considered and are persuasive.

2. Applicant argues that in the combination rejection of Korchnak et al. in view of Weber, wherein secondary reference, Weber, Jr. fails to teach or suggest steps of fixing being carried out on the hole in such a way that the hole is completely covered by the die-cut and the unexpanded foam body is located within the hole because Weber's foam being to cream immediately after being laid down and enters the corroded opening in a creamed or expanded state. Weber further fails to teach or suggest the step of subsequently heating the unexpanded foam body in such a way that the foam body foamingly expands, wherein the supply of heat is continued until the foamingly expanded foam body completely fills and/or covers the hole.

Applicant's arguments are fully considered and found persuasive.

3. Applicant argues that in the combination rejection of Pierrot et al. in view of Ogawa, wherein secondary reference, Ogawa fails to teach or suggest steps of fixing being carried out on the hole in such a way that the hole is completely covered by the die-cut and the unexpanded foam body is located within the hole because Ogawa discloses urethane elastomer being in a liquid state and is non-foamable and subsequently undergoes a gasification reaction which is restrained not to foam so that the urethane elastomer is directly solidify. Thus, Ogawa does not disclose a nonfoamingly unexpanded foam body or a foam body which is foamable, and also does not disclose step of

subsequently heating the unexpanded foam body in such a way that the foam body foamingly expands, wherein the supply of heat is continued until the foamingly expanded foam body completely fills and/or covers the hole.

Applicant's arguments are fully considered and found persuasive.

4. Applicant argues that in the combination rejection of Smith et al. in view of Ogawa, wherein neither Smith nor Ogawa teaches or suggests a method having a step of fixing an least partly single-sidedly self-adhesively treated die-cut having a backing, which is provided on the adhesively treated side with a non-foamingly unexpanded foam body, said fixing being carried out on the hole such a way that the unexpanded foam body is located within the hole. They further fail to teach or suggest step of subsequently heating the unexpanded foam body in such a way that the foam body foamingly expands, wherein the supply of heat is continued until the foamingly expanded foam body completely fills and/or covers the hole. Applicant's arguments are fully considered and found persuasive.

5. Applicant argues that in the combination rejection of Smith et al. in view of Preston, wherein Preston does not teach or suggest the step of subsequently heating urethane or high density silicon elastomer within the sheath to expand the elastomer and continuing until the elastomer foamingly expanded foam body completely fills and/or covers the hole. Applicant's

argument is fully considered and found persuasive. However, Applicant's arguments are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Cydzik et al. (US 6,114,004).**

8. Korchnak et al. discloses a method for fixing a crack in the tank, which comprises crack (13) or hole or die-cut having a backing layer or patch (11) whose area is greater than the area of hole or crack (13), wherein backing layer is provided in particular centrally on the repairing side of the crack, wherein fixing being carried out on the crack in such a way that the crack is completely covered by the die-cut (See figure 1a, paragraph # 5, 62). It further teaches that the patch (11) or backing layer is made of woven or non-woven fabric or a composite material such as fiber composite (See paragraph # 10, 22), which inherently suggests that the backing layer comprises in particular textile material. It further teaches that the die cut (13) has an adhesive coating (12) over its full area beneath the crack, wherein adhesive

coating is selected of acrylic coating on the opposite side from the adhesive (See paragraphs # 55-58).

9. Korchnak et al. discloses all claimed structural limitations as discussed above, but fails to teach or suggest EVA foam body for sealing crack.

10. Cydzik et al. ('004) discloses an invention which is related to seal the cavity of a vehicle, wherein invention comprises sealing material such as EVA (See col.10 lines 4-7 in the section of "Sealing member)) is disposed within the cavity and heated by other heat source, so the sealing member may be foamed and conform the shape of the cavity (See col.15 lines 35-63), wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36).

11. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Korchnak et al. by providing EVA foam body of Cydzik et al. because such material having foaming temperature appropriate to the temperature range of intended application, such as a cavity sealing article. To combine two known sealing methods would be obvious to one of ordinary skill in the art, since such would be expected to supplement each other.

12. **Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Cydzik et al. (US 6,114,004) further in view of Ashcroft et al. (US 3,689,320).**

13. Korchnak et al. and Cydzik et al. disclose all claimed structural limitations as discussed above. Korchnak et al. further discloses textile backing layer which comprises woven fabrics, but fails to teach or suggest weft count or warp count of woven fabrics.

14. Ashcroft et al. discloses an invention which comprises woven cotton fabric mechanical damping material or for decoration, wherein invention comprises woven cotton fabric having 72 wrap count and 60 weft count (See examples 9-11).

15. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Korchnak et al. by providing weft count or warp count of woven fabrics because such alignments makes the fabric to be easily compressed in the shape of body and also easily removed from the body, and further provides fabric with adequate absorptive property as suggested by Ashcroft et al. ('320).

16. **Claims 1-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004).**

17. Smith et al. ('007) discloses an invention for repairing composition and structure wherein invention comprises an opening; a patch (19) as a textile backing layer comprises layers of woven fabric (22-24) and bottom layer (25) for the patch to adhere; and adhesive layer (26) which is opposite from the adhesive (25) (See figure 3). It further teaches that the opening comprises reinforcing material and/or thickening agent (31, 32). Figure 3 further teaches that the textile backing layer whose area is greater than the area of the opening to be obturated and which is provided particular centrally, on the adhesively treated side, and fixing being carried out on the hole in such a way that the hole is completely covered by die-cut and resin material is located within the hole. It further discloses light source (33) for curing the patch.

18. Smith et al. discloses all claimed structural limitations as discussed above, but fails to teach or suggest EVA foam body.

19. Cydzik et al. ('004) discloses an invention which is related to seal the cavity of a vehicle, wherein invention comprises sealing material such as EVA (See col.10 lines 4-7 in the section of "Sealing member")) is disposed within the cavity and heated by other heat source, so the sealing member may be foamed and conform the shape of the cavity (See col.15 lines 35-63), wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36).

20. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Smith et al. by providing EVA foam body of Cydzik et al. because such material having foaming temperature appropriate to the temperature range of intended application, such as a cavity sealing article for use in automobile industry. To combine two known sealing methods would be obvious to one of ordinary skill in the art, since such would be expected to supplement each other.

21. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004) and further in view of Ashcroft et al. (US 3,689,320).**

22. Smith et al. and Cydzik et al. disclose all claimed structural limitation as discussed above. Smith et al. also teaches that the patch or backing layer comprises layers of woven fabrics, but fails to teach or suggest weft count or warp count of woven fabrics.

23. Ashcroft et al. discloses an invention which comprises woven cotton fabric mechanical damping material or for decoration, wherein invention comprises woven cotton fabric having 72 wrap count and 60 weft count (See examples 9-11).

24. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Smith et al. by providing

weft count or warp count of woven fabrics because such alignments makes the fabric to be easily compressed in the shape of body and also easily removed from the body, and further provides fabric with adequate absorptive property as suggested by Ashcroft et al. ('320).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DIMPLE N. BODAWALA** whose

telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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